

B8595E

3.R38-6

1988/89

Copy 1

NOVEMBER 1 FIRST OFFICIAL ESTIMATE
FY....

B8595E
3.R38-6

Copy 1



STATE OF SOUTH CAROLINA
BOARD OF ECONOMIC ADVISORS

James A. Morris, Ph.D., Chairman
Barbara A. Feinn, Ph.D., Executive Secretary
Bobby M. Bowers
S. Hunter Howard, Jr.

S. C. STATE LIBRARY

NOV 1 1987

Rembert C. Dennis Building
Suite 345
1000 Assembly Street
Columbia, S. C. 29201
803/734-3784

STATE DOCUMENTS

To: South Carolina Budget and Control Board

Subject: November 1 First Official Estimate for FY 1988-89

In accordance with Sections 11-9-880 and 11-9-890 of the 1976 Code, as last amended by Section 46, Part II, of Act 540 of 1986, the Board of Economic Advisors submits the first official estimate for Fiscal Year 1988-89 revenues of \$3050 million and corresponding quarterly estimates.

These estimates have been made at a time when the economic outlook has been affected by dramatic worldwide financial events which have not yet run their course. Furthermore, the impact of the stock market decline on the "real" economy of production, employment, et al. has yet to be measured accurately and cannot be until some stability is reached in financial markets at some point in the near future.

On the basis of discussions with economic and financial experts and analysis of existing data, the BEA has developed at least a preliminary scenario of future economic events in the nation and State over the relevant time period. If the stock market stabilizes over the next few weeks at a range of 1900-2100, the economy should move forward at some reasonable pace such as a 1 - 2 percent increase in real GNP with inflation at rates of 3 - 4 percent. The probability of

a mild recession in early 1988 has increased, but the more likely probability is for any recession to be delayed until late 1989.

The most probable outcome, therefore, at this point is for economic growth to continue through Fiscal Year 1989, but the probability of continued prosperity has been reduced somewhat over the previous planning estimates. Until the situation has clarified in the financial markets, which will take some time, any judgment on the impact on the economy of the stock market decline must be tentative in nature. For purposes of the November 1 revenue estimate, the assumption is made that the economy of the nation will continue to expand in an uneven manner, and that the State's economy will continue to display greater relative strength than the nation.

Given these assumptions, the BEA recommends making no change in the revenue estimate for FY 1987-88 at this time and makes an estimate of \$3050 million for FY 1988-89, as cited in the accompanying tables. It should be noted that there is softness in some of the revenue items in this year's Appropriations Bill, principally in the estimate of Earnings on Investment. The estimate made by the General Assembly is \$15 million higher than the current estimate of the State Treasurer, but since this amount is covered by the Capital Expenditure Fund, no adjustment seems appropriate at this time. In this connection, it is noted that interest rates have moved downward recently, but the future in this respect is not clear.

The essence of the matter is that in the absence of clarity on the impact of the stock market decline and other problems on the real economy, the BEA recommends no change in the planning estimates already made. Relatively minor adjustments could be made at this

time, but no real purpose would be served by such adjustments. If consumer and investor confidence is seriously shaken by the stock market decline, or by subsequent financial problems, then significant adjustments will have to be made in revenue estimates. At this moment the most probable outlook is for continued economic and revenue growth for the State, even though probabilities have shifted somewhat.

Board of Economic Advisors

November 1, 1987

TABLE I

GENERAL FUND REVENUES
Forecast 1987-88 and 1988-89
In Millions of Dollars

			ACTUAL 1986-87	REVISED 1987-88	ESTIMATE 1988-89
TOTAL	GENERAL	FUND (1)	2692.8	2886.0 *	3050.0
	Total Regular Sources (1)		2651.8	2829.6 *	3000.0
	Sales Tax (1)		946.9	1001.9	1062.0
	Individual Income Tax		1008.9	1063.7	1149.0
	Corporation Income Tax		184.9	224.3	233.0
	All Other		511.0	539.7 *	556.0
	Miscellaneous Sources		41.0	56.4	50.0
	Education Improvement Fund		236.3	250.5 **	265.5 **
	Interest on Education Improvement Fund		2.4	1.8	1.9
TOTAL			238.7	252.3	267.4
			<u>RATES OF CHANGE</u>		
TOTAL	GENERAL	FUND		7.2%	5.7%
	Total Regular Sources			6.7	6.0
	Sales Tax			5.8	6.0
	Individual Income Tax			5.4	8.0
	Corporation Income Tax			21.3	3.9
	All Other			5.6	3.0
	Miscellaneous Sources			37.7	-11.3
	Education Improvement Fund			6.0	6.0
	Interest on Education Improvement Fund			-25.0	5.6
TOTAL				5.7	5.9

(1) Net of Education Improvement Fund.

* Before adjustment of Earned on Investments by State Treasurer to \$64 million from \$79 million. With adjustment, category would be decreased \$15 million.

** One-fifth of total sales tax.

REVENUE FORECASTING PROCEDURES
BOARD OF ECONOMIC ADVISORS
FISCAL YEAR 1989

The procedures and methodology of the Board of Economic Advisors in the preparation of the first official revenue forecast for Fiscal Year 1988-89 involved five major stages: 1) providing the economic background and setting at the national and State levels for the revenue forecasts; 2) reconciling the February 10, 1987 Board of Economic Advisors Estimate for Fiscal Year 1987-88 with Legislative actions in the 1988 Appropriation Act and the Governor's revenue vetoes, and with reevaluations of tax enhancements; 3) interpreting recent and historical revenue relationships; 4) analyzing the outputs of the SCOPE model under alternative scenarios; and 5) interacting with officials of other states with responsibility for revenue forecasting.

The Board members had meetings as in the past with experts and professional economists for economic intelligence gathering. These included a meeting on October 27, 1987 with J. Alfred Broaddus, Jr., Ph.D., Senior Vice President and Director of Research, the Federal Reserve Bank of Richmond; Ben E. Laden, Ph.D., Vice President and Chief Economist, T. Rowe Price Associates, Inc., Baltimore; Randolph C. Martin, Ph.D., Director of the Division of Research and Professor of Economics, University of South Carolina; Douglas P. Woodward, Ph.D., Research Economist, Division of Research, University of South Carolina; and Holly H. Ulbrich, Ph.D., Alumni Professor of Economics, Clemson University, in which the outlook for the economy of the nation and South Carolina was discussed. The resources of the national forecasting groups by which the SCOPE model and other forecasts are driven, Data Resources, Inc., Evans Economics, Inc., and Wharton Econometric Forecasting Associates were available weekly and monthly to Board members. Materials from a variety of sources--international, national and State publications--were also made available to Board members. In addition, there was Board interaction with Martin S. Feldstein, Professor of Economics, Harvard University and President of the National Bureau of Economic Research, and former Chairman of the President's Council of Economic Advisors; and Paul A. Volcker, former Chairman of the Federal Reserve Board of Governors, and others at the U.S. Economic Outlook Conference held on October 7 in New York City by Data Resources, Inc.

The preparation of the economic and revenue forecasts involved many meetings between July 1 and November 1, 1987 with preliminary estimates, modifications and refinements of estimates.

Board of Economic Advisors
November 1, 1987

BRIEF OVERVIEW OF THE SCOPE MODEL

The SCOPE (South Carolina Operations Planning and Evaluation) Model was initiated in 1972 in the Office of Chief Economist (originally in the Governor's office). It was designed and operates as a policy and forecasting tool for top level executive, legislative and management decision making. SCOPE is an econometric model designed to reflect the South Carolina economy and to forecast the performance of major economic variables in the State, particularly tax revenues, employment and income. The model is based on a framework of economic activity in the State relative to national economic activity. Approximately 85 exogenous national variables are currently taken from three leading national forecasting services (Data Resources, Inc., Chase Econometrics, and Evans Economics, Inc.).

The SCOPE core model consists of 63 equations, of which 55 are stochastic* and 8 are identities. SCOPE attempts to reflect the diversity of the South Carolina economy by including 20 industrial sectors of manufacturing and nonmanufacturing employment, and a series of equations for wages, personal income, unemployment, taxable sales and State tax revenue.

Durable Manufacturing Employment

The durable manufacturing employment block consists of 6 stochastic equations for the major industries in the State as reported by the South Carolina Employment Security Commission. The employment equations for each separate industry are expressed as a function of a national consumption expenditure index appropriate for that particular industry, a national industrial production index corresponding to that industry and the national level of employment in that industry. The durable employment forecasts include the following industries: Lumber and Products, Stone, Clay and Glass, Fabricated Metal Products, Electrical and Nonelectrical Machinery, and Other Durables which includes Furniture and Fixtures, Instruments and Related Products.

Nondurable Manufacturing Employment

The nondurable manufacturing employment block consists of 7 stochastic equations for the major nondurable industries in the State. Like the durable block, the employment equation for each industry is expressed as a function of a national consumption index appropriate for that particular industry, a national industrial production index for that particular industry and the national level of employment in that industry. Employment forecasts are available for each of the following nondurable industries: Food and Kindred Products, Textile Mill Products, Apparel, Paper, Printing and Publishing, Chemicals, and Other Nondurables, such as Rubber and Miscellaneous Plastics Products.

* Stochastic is defined as a type of modeling for time series analysis explaining future probability from historical experience.

Nonmanufacturing Employment

The nonmanufacturing employment block is disaggregated into 7 stochastic equations: Construction, Transportation and Public Utilities, Services, Trade, Finance-Insurance-Real Estate, State and Local Government, and Federal Government. Employment growth in these industries is specified as functions of State population, national employment in these industries and national consumption indices.

Personal Income

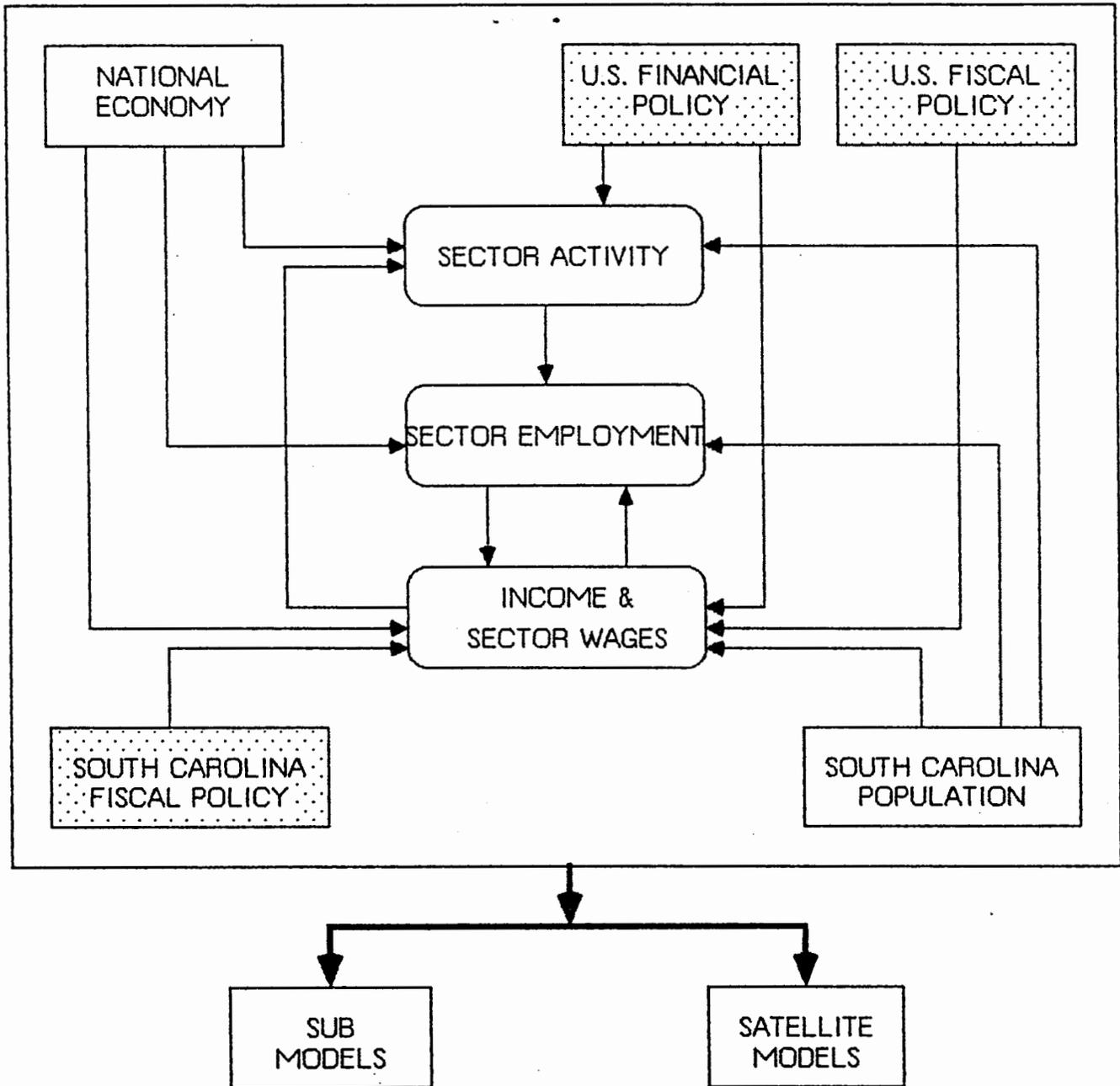
The personal income block is composed of 11 equations, one equation for the unemployment rate, and 10 additional equations for each of the 10 major components of personal income as published by the Bureau of Economic Analysis, Department of Commerce. These equations are specified as functions of their respective national and State income and employment variables. In addition, equations are estimated for wage and salary disbursements for all major industries and are specified as functions of national wage trends and State employment levels.

Revenues

The revenue section of the model emphasizes 4 major stochastic Regular Revenue Sources equations: 1) South Carolina corporate income tax, 2) South Carolina individual income taxes, 3) South Carolina retail sales tax, and 4) all other taxes. These equations are individually specified as functions of aggregate employment and income with their respective coefficients and constants. In addition, there are 2 stochastic equations for taxable sales and refunds.

SCOPE MODEL

SOUTH CAROLINA OPERATIONS, PLANNING & EVALUATION MODEL



-  Exogenous Variables
-  Exogenous Policy Variables
-  Endogenous Variables